

This listing of claims will replace all prior versions, and listings, of claims in the application:

**The Status of the Claims**

1. (Currently Amended) A driver circuit comprising:

a duty cycle adjustment circuit;

an output stage configured to receive an input signal having a duty cycle; and

a replica output stage configured to receive the input signal and to produce an output signal that is coupled to the duty cycle adjustment circuit, wherein the duty cycle adjustment circuit is configured to affect the duty cycle of the input signal, wherein the output stage is configured to consume a first amount of current and the replica output stage is configured to consume a second amount of current that is less than the first amount of current.

2. (Currently Amended) A driver circuit comprising:

a duty cycle adjustment circuit;

an output stage configured to receive an input signal having a duty cycle;

a replica output stage configured to receive the input signal and to produce an output signal that is coupled to the duty cycle adjustment circuit, wherein the duty cycle adjustment circuit is configured to affect the duty cycle of the input signal; and

~~A driver circuit as defined by claim 1, further comprising~~ a driver stage coupled to the output stage, wherein the driver stage includes an output configured to produce the input signal coupled to the output stage and wherein the driver stage further includes an input coupled to the duty cycle adjustment circuit and configured to receive a duty cycle adjustment signal therefrom.

3. (Original) A driver circuit as defined by claim 1, wherein the replica output stage includes a duty cycle characteristic that is similar to a duty cycle characteristic of the output stage.

4. Canceled

5. (Original) A driver circuit as defined by claim 1, wherein the output stage is configured to be terminated by circuit separate from the output stage.

6. (Original) A driver circuit as defined by claim 1, wherein the output stage includes transistors.

7. (Original) A driver circuit as defined by claim 6, wherein the transistors are selected from a group consisting of field effect transistors and bipolar junction transistors.

8. (Original) A driver circuit as defined by claim 6, wherein the transistors comprise metal-oxide semiconductor field effect transistors.

9. (Original) A driver circuit as defined by claim 6, wherein the replica output stage includes transistors.

10. (Currently Amended) A driver circuit comprising:

a duty cycle adjustment circuit;

an output stage configured to receive an input signal having a duty cycle,  
wherein the output stage includes transistors; and

a replica output stage configured to receive the input signal and to produce an output signal that is coupled to the duty cycle adjustment circuit, wherein the duty cycle adjustment circuit is configured to affect the duty cycle of the input signal, wherein the replica output stage includes transistors; and ~~A driver circuit as defined by claim 9, further comprising~~ a bias circuit coupled to the output stage and the replica output stage, wherein the bias circuit is configured to provide more current for the output stage than for the replica output stage.

11. (Original) A driver circuit as defined by claim 9, wherein the transistors of the output stage and the replica output stage comprise discrete components.

12. (Original) A driver circuit as defined by claim 9, wherein the transistors of the output stage and the replica output stage are integrated on a substrate.

13. (Currently Amended) A method of controlling a duty cycle of an output signal, the method comprising:

providing input signal to an output stage, wherein the output stage comprises a first duty cycle characteristic;

providing the input signal to a replica output stage, wherein the replica output stage comprises a second duty cycle characteristic similar to the first duty cycle characteristic and wherein the replica output stage produces a replica output signal;

coupling the replica output signal from the replica output stage to a duty cycle control circuit that compares a duty cycle of the replica output signal from the replica output stage to a desired duty cycle and outputs a duty cycle correction signal; and

coupling the duty cycle correction signal from the duty cycle control circuit to a circuit that feeds the input signal to the output stage and the replica output stage, wherein the output stage is configured to consume a first amount of current and the replica output stage is configured to consume a second amount of current that is less than the first amount of current.

14. (Original) A method as defined by claim 13, wherein the replica output stage includes a duty cycle characteristic that is similar to a duty cycle characteristic of the output stage.

15. canceled

16. (Original) A method as defined by claim 13, wherein the output stage is configured to be terminated by circuit separate from the output stage.

17. (Currently Amended) A method of controlling a duty cycle of an output signal, the method comprising:

\_\_\_\_\_ providing input signal to an output stage, wherein the output stage comprises a first duty cycle characteristic;

\_\_\_\_\_ providing the input signal to a replica output stage, wherein the replica output stage comprises a second duty cycle characteristic similar to the first duty cycle characteristic and wherein the replica output stage produces a replica output signal;

\_\_\_\_\_ coupling the replica output signal from the replica output stage to a duty cycle control circuit that compares a duty cycle of the replica output signal from the replica output stage to a desired duty cycle and outputs a duty cycle correction signal; and

coupling the duty cycle correction signal from the duty cycle control circuit to a circuit that feeds the input signal to the output stage and the replica output stage; and A  
~~method as defined by claim 13, further comprising~~ providing a first bias current to the output stage and providing a second bias current to the replica output stage, wherein a magnitude of the first bias current is larger than a magnitude of the second bias current.

18. (Original) A circuit comprising:

a driver stage having an input and an output;

an output stage coupled to the output of the driver stage and configured to receive an input signal having a duty cycle therefrom, wherein the output stage is configured to produce an output signal;

a laser diode coupled to the output stage and configured to receive the output signal;

a replica output stage coupled to the driver stage, wherein the replica output stage is configured to receive the input signal from the driver stage and to produce a replica output signal; and

a duty cycle adjustment circuit coupled to the input of the driver stage and the replica output stage, wherein the duty cycle adjustment circuit is configured to receive the replica output signal and to produce a duty cycle correction signal that is coupled to the input of the driver stage.

19. (Original) A circuit configuration as defined by claim 18, wherein the replica output stage includes a duty cycle characteristic that is similar to a duty cycle characteristic of the output stage.

20. (Original) A circuit configuration as defined by claim 18, wherein the output stage is configured to consume a first amount of current and the replica output stage is configured to consume a second amount of current that is less than the first amount of current.